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PETER D. ALVEY, P.E., JANUARY 12, 2006

<p style="text-align: right;">Page 1</p> <p>1</p> <p>2</p> <p>3</p> <p>4 IN THE UNITED STATES DISTRICT COURT</p> <p>5 FOR THE DISTRICT OF MONTANA</p> <p>6 BILLINGS DIVISION</p> <p>7</p> <p>8 UNITED STATES FIDELITY AND GUARANTY COMPANY,</p> <p>9</p> <p>10 Plaintiffs,</p> <p>11 and Cause No.</p> <p>12 CV-04-29-BLG-RFC</p> <p>13 CONTINENTAL INSURANCE COMPANY,</p> <p>14 Plaintiff Intervenor,</p> <p>15 v.</p> <p>16 SOCO WEST, INC. BRILLIANT NATIONAL SERVICES,</p> <p>17 INC., STINNES CORPORATION, and BRENNTAG</p> <p>18 (HOLDING) N.V.,</p> <p>19</p> <p>20 Defendants.</p> <p>21</p> <p>22 DEPOSITION OF PETER D. ALVEY, P.E.</p> <p>23 Thursday, January 12, 2006</p> <p>24 9:40 a.m.</p> <p>25 Reported by:</p> <p>Mary Goff, Professional Reporter</p> <p>JOB NO. 13890AM</p>	<p style="text-align: right;">Page 3</p> <p>1</p> <p>2</p> <p>3 APPEARANCES:</p> <p>4</p> <p>5 SONNENSCHN NATH & ROSENTHAL</p> <p>6 Attorneys for Plaintiff UNITED STATES FIDELITY</p> <p>7 AND GUARANTY COMPANY</p> <p>8 8000 Sears Tower</p> <p>9 233 South Wacker Drive</p> <p>10 Chicago, Illinois 60606</p> <p>11</p> <p>12 BY: JOHN I. GROSSBART, ESQ.</p> <p>13</p> <p>14 DAVIS, HATLEY, HAFEMAN & TIGHE, P.C.</p> <p>15 Attorneys for Plaintiff Intervenor CONTINENTAL</p> <p>16 INSURANCE COMPANY</p> <p>17 Milwaukee Station, Third Floor</p> <p>18 100 River Drive North</p> <p>19 Great Falls, Montana 59405</p> <p>20</p> <p>21 BY: MAXON R. DAVIS, ESQ.</p> <p>22</p> <p>23 LINQUIST & VENNUM P.L.L.P.</p> <p>24 Attorneys for Defendants SOCO WEST, INC.,</p> <p>25 BRENNTAG WEST, INC., BRILLIANT NATIONAL</p> <p>SERVICES, INC., STINNES CORPORATION, and</p> <p>BRENNTAG (HOLDING) N.V.</p> <p>4200 IDS Center</p> <p>80 South Eighth Street</p> <p>Minneapolis, Minnesota 55402</p> <p>BY: CHRISTOPHER L. LYNCH, ESQ.</p> <p>ALSO PRESENT: Robert Morrison</p>
<p style="text-align: right;">Page 2</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> <p>7</p> <p>8</p> <p>9</p> <p>10 January 12, 2006</p> <p>11 9:40 a.m.</p> <p>12 New York, New York</p> <p>13</p> <p>14 Deposition of PETER D. ALVEY, P.E.,</p> <p>15 held at the offices of Sonnenschein Nath &</p> <p>16 Rosenthal, LLP, 1221 Avenue of the Americas,</p> <p>17 24th Floor, New York, New York 10020, pursuant</p> <p>18 to Notice, before Mary Goff, a Notary Public</p> <p>19 of the State of New York.</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 4</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5 IT IS HEREBY STIPULATED AND AGREED, by</p> <p>6 and between the attorneys for the respective</p> <p>7 parties herein, that filing and sealing of the</p> <p>8 transcript be waived, and the same are hereby</p> <p>9 waived.</p> <p>10 IT IS FURTHER STIPULATED AND AGREED that</p> <p>11 all objections, except as to the form of the</p> <p>12 question, shall be reserved to the time of the</p> <p>13 trial.</p> <p>14 IT IS FURTHER STIPULATED AND AGREED that</p> <p>15 the within deposition may be sworn to and</p> <p>16 signed before any officer authorized to</p> <p>17 administer an oath, with the same force and</p> <p>18 effect as if signed and sworn to before the</p> <p>19 Court.</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

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ESQUIRE DEPOSITION SERVICES - CHICAGO
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DEFENDANTS' 3/23/06 MOTION IN LIMINE # 3

ATTACHMENT J

PETER D. ALVEY, P.E., JANUARY 12, 2006

<p style="text-align: right;">Page 9</p> <p>1 Alvey</p> <p>2 A That is my expert rebuttal report</p> <p>3 dated October 21, 2005.</p> <p>4 Q And Exhibit 2522?</p> <p>5 A That is a supplemental expert</p> <p>6 report dated January 3, 2006.</p> <p>7 Q And do these three reports contain</p> <p>8 complete statements of all opinions that you</p> <p>9 expect to testify to at the trial of this case</p> <p>10 and the basis and reasons for those opinions?</p> <p>11 A Yeah. It provides all the opinions</p> <p>12 that I have generated to date.</p> <p>13 MR. DAVIS: Do you have any other</p> <p>14 questions or are we done?</p> <p>15 MR. LYNCH: Maybe we'll go a little</p> <p>16 bit longer.</p> <p>17 Q (BY MR. LYNCH) At this time do you</p> <p>18 have any -- do you expect to supplement these</p> <p>19 reports?</p> <p>20 A At this time, I do not.</p> <p>21 Q At this time do you expect to</p> <p>22 testify to any opinions that -- on any matters</p> <p>23 that are not expressed -- or contained in</p> <p>24 these reports?</p> <p>25 A Not at this time.</p>	<p style="text-align: right;">Page 11</p> <p>1 Alvey</p> <p>2 is that a complete list of all the documents</p> <p>3 you considered in preparing this report and</p> <p>4 forming the opinions expressed in the</p> <p>5 September 6 report?</p> <p>6 A I think there was one or two</p> <p>7 documents that didn't make it on the list.</p> <p>8 Q Do you know what those documents</p> <p>9 are?</p> <p>10 A Particularly in Harris' rebuttal</p> <p>11 report he indicated the supplemental RI was</p> <p>12 not listed, and I did have that at the time.</p> <p>13 Q The -- that would be the addendum to</p> <p>14 the remedial investigation report?</p> <p>15 A Correct. And there were a couple</p> <p>16 other groundwater monitoring reports that I</p> <p>17 had. I forget what the dates were -- on</p> <p>18 those were. But they were on a CD, and they</p> <p>19 just didn't make it onto the document list.</p> <p>20 Q Were those reports that were</p> <p>21 prepared by Tetra Tech or Pioneer?</p> <p>22 A Correct.</p> <p>23 Q Any other documents that you</p> <p>24 considered in connection with the September 6</p> <p>25 report that are not on the list?</p>
<p style="text-align: right;">Page 10</p> <p>1 Alvey</p> <p>2 MR. DAVIS: You must be done now.</p> <p>3 Q (BY MR. LYNCH) Turn to Appendix B of</p> <p>4 your initial report. Is that a list of the</p> <p>5 documents you considered in connection with --</p> <p>6 in forming your opinions?</p> <p>7 MR. GROSSBART: No. Answer that</p> <p>8 question and give me your list.</p> <p>9 A Yeah. We do have a supplemental</p> <p>10 document list.</p> <p>11 THE DEPONENT: I gave it to you</p> <p>12 yesterday, actually.</p> <p>13 MR. GROSSBART: That's the only</p> <p>14 copy?</p> <p>15 THE DEPONENT: Yeah.</p> <p>16 MR. GROSSBART: Hang on for a</p> <p>17 second.</p> <p>18 MR. LYNCH: Do you want a quick</p> <p>19 break and we can make a copy of that?</p> <p>20 THE DEPONENT: That's it.</p> <p>21 MR. LYNCH: Mark this as 2523.</p> <p>22 (Deposition Exhibit 2523 was</p> <p>23 marked.)</p> <p>24 Q (BY MR. LYNCH) The question is: The</p> <p>25 documents listed in Appendix B, were those --</p>	<p style="text-align: right;">Page 12</p> <p>1 Alvey</p> <p>2 A Not that I am aware of.</p> <p>3 Q Can you tell me what Exhibit 2523</p> <p>4 is?</p> <p>5 A 2523 is a supplemental document</p> <p>6 list that I prepared subsequent to the</p> <p>7 completion of my September 6 report.</p> <p>8 Q Does that list contain all the</p> <p>9 documents that you had considered in</p> <p>10 connection with forming the opinions expressed</p> <p>11 in all -- any -- all three of your reports?</p> <p>12 A Actually, I think that's some</p> <p>13 documents that we received subsequent to the</p> <p>14 preparation of all three reports,</p> <p>15 specifically the Unifield documents. And I</p> <p>16 also got Mr. Morrison's deposition</p> <p>17 transcript, I believe.</p> <p>18 Q Are you able to identify the</p> <p>19 documents on that list that you received</p> <p>20 subsequent to filing your final supplemental</p> <p>21 report?</p> <p>22 A Other than the two that I</p> <p>23 mentioned, I can't think of any other ones.</p> <p>24 Perhaps Dale's deposition also. I don't</p> <p>25 recall when I received everything</p>

3 (Pages 9 to 12)

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<p style="text-align: right;">Page 105</p> <p>1 Alvey</p> <p>2 A I don't believe so, no.</p> <p>3 Q The ASTM standards you refer to you</p> <p>4 indicated dealt with TCE, correct?</p> <p>5 A Correct.</p> <p>6 Q Were any standards that deal with</p> <p>7 the use of PCE for bitumen extraction?</p> <p>8 A I'm not aware of any ASTM standards</p> <p>9 with PCE.</p> <p>10 Q Are you aware of any standards that</p> <p>11 use PCE?</p> <p>12 A No, I am not.</p> <p>13 Q The PPG Industry document you</p> <p>14 referred to, does that specifically refer to</p> <p>15 the effect that PCE would have on asphalt?</p> <p>16 A Yes.</p> <p>17 Q And what did it say?</p> <p>18 A Well, I would like to read the</p> <p>19 document to you. But I mean, basically it</p> <p>20 says spills of chlorinated solvents on</p> <p>21 asphalt should be cleaned up rapidly due to</p> <p>22 the fact that they deteriorate asphalt.</p> <p>23 That's my recollection.</p> <p>24 Q At what rate would the alleged</p> <p>25 spill -- strike that.</p>	<p style="text-align: right;">Page 107</p> <p>1 Alvey</p> <p>2 MR. DAVIS: I object. It's vague.</p> <p>3 Q (BY MR. LYNCH) What did you mean in</p> <p>4 your opinion when you said severe readily</p> <p>5 noticeable deterioration?</p> <p>6 A Well, readily noticeable or</p> <p>7 severe -- I mean, something that someone</p> <p>8 would have recognized. For example,</p> <p>9 discoloration; you know, removal of the</p> <p>10 bitumen to the point that the aggregate</p> <p>11 became exposed, became loose. It's something</p> <p>12 along those lines. What I -- what I am</p> <p>13 saying there is that someone would have</p> <p>14 noticed deterioration of the asphalt.</p> <p>15 Q How long would the alleged spill</p> <p>16 have to have been in contact with the asphalt</p> <p>17 for someone -- for it to result in severe</p> <p>18 readily noticeable deterioration?</p> <p>19 MR. GROSSBART: Objection to the</p> <p>20 incomplete nature of the hypothetical.</p> <p>21 A I haven't performed a calculation.</p> <p>22 Q (BY MR. LYNCH) Well, what variables</p> <p>23 will affect the rate at which perc dissolves</p> <p>24 asphalt?</p> <p>25 MR. GROSSBART: Objection to the</p>
<p style="text-align: right;">Page 106</p> <p>1 Alvey</p> <p>2 How long -- or what's the longest</p> <p>3 length of time that the alleged spill could</p> <p>4 have been in contact with an asphalt surface</p> <p>5 before it would have resulted in severe</p> <p>6 readily noticeable deterioration?</p> <p>7 MR. GROSSBART: Object to the form</p> <p>8 of the question. Severe readily noticeable</p> <p>9 deterioration is your word, not his.</p> <p>10 Deterioration -- you haven't even asked him to</p> <p>11 define deterioration as to whether -- you</p> <p>12 know, as to what it means from discoloration</p> <p>13 to dissolution, I guess, and anything in</p> <p>14 between. So your question is hopelessly</p> <p>15 vague.</p> <p>16 MR. DAVIS: I'll object to it as</p> <p>17 vague on the same basis. I assume, just to</p> <p>18 clarify in case he does go ahead and answer</p> <p>19 the question as phrased, that you're talking</p> <p>20 about the hypothetical spill -- or the</p> <p>21 hypothetical alleged spill, or are we talking</p> <p>22 about --</p> <p>23 MR. LYNCH: I believe I did say the</p> <p>24 alleged spill. But if I didn't, I'll rephrase</p> <p>25 the question.</p>	<p style="text-align: right;">Page 108</p> <p>1 Alvey</p> <p>2 question.</p> <p>3 A I mean, there's numerous variables</p> <p>4 that would --</p> <p>5 MR. GROSSBART: His opinion doesn't</p> <p>6 focus on the dissolving of asphalt.</p> <p>7 Q (BY MR. LYNCH) What variables would</p> <p>8 affect the rate at which perc deteriorates</p> <p>9 asphalt?</p> <p>10 A The similar variables.</p> <p>11 Q And what are those?</p> <p>12 A Again, there are multiple</p> <p>13 variables. But the length of time it was in</p> <p>14 contact with the asphalt, the -- the exact</p> <p>15 nature of the asphalt, the temperature, the</p> <p>16 day of the alleged spill, the wind, if it was</p> <p>17 raining. I mean, any number of variables.</p> <p>18 That's not an all inclusive list, but</p> <p>19 multiple variables obviously.</p> <p>20 Q What -- in offering an opinion</p> <p>21 that -- from the alleged spill there would</p> <p>22 have been severe readily noticeable</p> <p>23 deterioration of the asphalt surface, what did</p> <p>24 you assume the length of time of contact to</p> <p>25 be?</p>

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<p style="text-align: right;">Page 109</p> <p>1 Alvey</p> <p>2 A Well, I mean, looking at the</p> <p>3 specifics of the alleged spill, it would have</p> <p>4 been in contact for, you know, several</p> <p>5 minutes at least. You know, at least -- I</p> <p>6 mean, I think if we went back and looked, at</p> <p>7 least 10 or 20 minutes it was likely in</p> <p>8 contact with the asphalt.</p> <p>9 Q And what makes you say that?</p> <p>10 A Again, looking at the testimony --</p> <p>11 I forget -- and maybe even it's in Harris' or</p> <p>12 Dale's reports as well, that the testimony</p> <p>13 was that it was a bulk truck and that the</p> <p>14 bulk truck pumps between 60 and 100 gallons</p> <p>15 per minute. And you have a spill of 250 to</p> <p>16 1,000 gallons.</p> <p>17 So using the 60 gallon pumping rate</p> <p>18 and dividing 250 by 60 gets you a minimum of</p> <p>19 four before anyone knew there was a spill. So</p> <p>20 there's four minutes there. So that's the</p> <p>21 minimum. And then the maximum could be hours,</p> <p>22 I suppose. Probably not hours, because</p> <p>23 someone would have eventually smell it or</p> <p>24 something. But you know, there was some</p> <p>25 period of time -- assuming that everything</p>	<p style="text-align: right;">Page 111</p> <p>1 Alvey</p> <p>2 minutes, unless the hose was waving all over</p> <p>3 the place.</p> <p>4 Q (BY MR. LYNCH) So it's your opinion</p> <p>5 that in four minutes there would have been</p> <p>6 severe readily noticeable deterioration?</p> <p>7 A Yes.</p> <p>8 Q And what is that based on?</p> <p>9 A Again, it's based on, you know, the</p> <p>10 literature that says you need to rapidly</p> <p>11 clean it up. I didn't do any scientific</p> <p>12 calculation. But it's my opinion that there</p> <p>13 would have been noticeable -- at a minimum</p> <p>14 staining of discoloration of the asphalt.</p> <p>15 Q In the standard test results you</p> <p>16 looked at with TCE, what's the length of time</p> <p>17 of contact?</p> <p>18 A I don't know sitting here today.</p> <p>19 Q Have you ever observed perc spilled</p> <p>20 onto asphalt?</p> <p>21 A I don't believe I have ever seen a</p> <p>22 spill in progress.</p> <p>23 Q Have you ever observed asphalt after</p> <p>24 perc had been spilled on it?</p> <p>25 A I'm sure that I have. I mean, I</p>
<p style="text-align: right;">Page 110</p> <p>1 Alvey</p> <p>2 they said is correct, the truck had to be</p> <p>3 pumping PCE unimpeded for several minutes</p> <p>4 before anyone even began to respond to it. So</p> <p>5 a minimum of four minutes, a maximum of, I</p> <p>6 don't know.</p> <p>7 Q Would it make a difference if the</p> <p>8 surface was sloped?</p> <p>9 MR. DAVIS: Object as to vague. I</p> <p>10 mean, sloped at 1 degree, sloped at 45</p> <p>11 degrees?</p> <p>12 Q (BY MR. LYNCH) When you are assuming</p> <p>13 --</p> <p>14 MR. GROSSBART: Excellent objection.</p> <p>15 Q (BY MR. LYNCH) When you are assuming</p> <p>16 a minimum of four minutes, is that the assumed</p> <p>17 contact time on the -- I'm talking about the</p> <p>18 contact time between perc and the asphalt.</p> <p>19 MR. GROSSBART: On the four minute</p> <p>20 point? He just explained it. Asked and</p> <p>21 answered.</p> <p>22 A Well, like I said, it had to be</p> <p>23 pumping out for four minutes. So at some</p> <p>24 spot in the asphalt I would assume that it</p> <p>25 was in a contact for a minimum of four</p>	<p style="text-align: right;">Page 112</p> <p>1 Alvey</p> <p>2 have been to a lot of some solvent</p> <p>3 facilities, but I couldn't be more specific</p> <p>4 than that.</p> <p>5 Q Would the makeup of asphalt affect</p> <p>6 the rate at which contact with perc would</p> <p>7 result in severe readily noticeable</p> <p>8 deterioration?</p> <p>9 A Yes. There are different grades of</p> <p>10 asphalt.</p> <p>11 Q Did you make any assumptions in</p> <p>12 forming Opinion 2 as to what the makeup of the</p> <p>13 asphalt at the Dyce facility was?</p> <p>14 A No specific assumptions, no.</p> <p>15 Q What's the range at which that could</p> <p>16 affect the rate of severe readily noticeable</p> <p>17 deterioration?</p> <p>18 A I'm not quite sure I understand</p> <p>19 that question.</p> <p>20 Q The different grades of asphalt, you</p> <p>21 said, would affect the rate of severe readily</p> <p>22 noticeable deterioration. How much can that</p> <p>23 affect it by?</p> <p>24 A Probably quite a bit. I mean, if</p> <p>25 you can tell me what grade of asphalt was</p>

28 (Pages 109 to 112)

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<p style="text-align: right;">Page 117</p> <p>1 Alvey</p> <p>2 discoloration. Anything that would be</p> <p>3 noticeable by the employees.</p> <p>4 Q What do you mean by some? Is there</p> <p>5 a degree of discoloration?</p> <p>6 A No, I didn't try to quantify the</p> <p>7 degree of discoloration.</p> <p>8 Q Do you mean some meaning if somebody</p> <p>9 was capable of human perception? Is that</p> <p>10 some?</p> <p>11 MR. GROSSBART: I don't think he</p> <p>12 said that. He said noticeable. Come on.</p> <p>13 Let's move on.</p> <p>14 A I mean, I -- I said noticeable. So</p> <p>15 someone who would have walked out there would</p> <p>16 have seen some discoloration or staining of</p> <p>17 the asphalt.</p> <p>18 MR. LYNCH: Do you want to take a</p> <p>19 lunch break now?</p> <p>20 MR. GROSSBART: That's fine.</p> <p>21 (A break was taken from 12:45 p.m.</p> <p>22 to 1:35 p.m.)</p> <p>23 Q (BY MR. LYNCH) We're returning from</p> <p>24 lunch break. Before we left for break,</p> <p>25 Mr. Alvey, we were discussing Opinion No. 2 of</p>	<p style="text-align: right;">Page 119</p> <p>1 Alvey</p> <p>2 mixtures, ASTM International guide?</p> <p>3 A Correct.</p> <p>4 Q And then the last document</p> <p>5 identified on that page, bulk handling and</p> <p>6 properties of PPG, chlorinated solvents,</p> <p>7 perchlorethylene, trichlorethylene,</p> <p>8 tri-ethane, 111-trichlorethane, PPG</p> <p>9 Industries, Inc.?</p> <p>10 A Correct.</p> <p>11 Q Any other documents identified in</p> <p>12 Appendix B or any supplemental?</p> <p>13 A No. No.</p> <p>14 Q And do those documents, in addition</p> <p>15 to the deposition transcripts, form the</p> <p>16 complete basis for your understanding as to</p> <p>17 the rate at which perchlorethylene will</p> <p>18 deteriorate asphalt?</p> <p>19 A Subsequent to my report I have read</p> <p>20 Dale's deposition. You know, so obviously he</p> <p>21 addresses this issue in much more detail than</p> <p>22 I do. But no. I mean, my opinion is that it</p> <p>23 would have caused some noticeable</p> <p>24 deterioration.</p> <p>25 Q And that opinion again is based on</p>
<p style="text-align: right;">Page 118</p> <p>1 Alvey</p> <p>2 your September 6 report. And I just want to</p> <p>3 clarify --</p> <p>4 MR. GROSSBART: What are we on?</p> <p>5 MR. LYNCH: Opinion 2, page 8.</p> <p>6 THE DEPONENT: Page 8.</p> <p>7 Q (BY MR. LYNCH) And is it your</p> <p>8 testimony that the basis for your</p> <p>9 understanding as to the rate at which perc</p> <p>10 will deteriorate asphalt are the documents you</p> <p>11 have identified in Appendix B to your report?</p> <p>12 A And the deposition transcripts</p> <p>13 of -- some of the employees testified about</p> <p>14 the deterioration caused by perc as well.</p> <p>15 Q Okay. Do you recall which</p> <p>16 employees?</p> <p>17 A No, not specific names.</p> <p>18 Q And in addition to the deposition</p> <p>19 transcripts it's the -- if you turn to</p> <p>20 Appendix B -- page 2, Appendix B in your</p> <p>21 September 6 report --</p> <p>22 A Okay.</p> <p>23 Q -- it's the document, the standard</p> <p>24 test methods for quantitative extraction of</p> <p>25 vitamin -- from bitumen from bituminous paving</p>	<p style="text-align: right;">Page 120</p> <p>1 Alvey</p> <p>2 the deposition testimony and the two documents</p> <p>3 we have just identified?</p> <p>4 A Correct.</p> <p>5 MR. LYNCH: Mark this as the next</p> <p>6 exhibit.</p> <p>7 (Deposition Exhibit 2544 was</p> <p>8 marked.)</p> <p>9 Q (BY MR. LYNCH) I'm showing you</p> <p>10 Exhibit 2544. Are those the standard test</p> <p>11 methods --</p> <p>12 A Yes, it is.</p> <p>13 Q -- upon which you based your</p> <p>14 opinion? And I believe you have already</p> <p>15 indicated that the -- that document refers to</p> <p>16 using TCE and some other solvents but not perc</p> <p>17 as a solvent for extracting bitumen?</p> <p>18 A Bitumen. That is correct.</p> <p>19 Q Okay. Do you have any understanding</p> <p>20 as to whether the rate at which perc will</p> <p>21 deteriorate asphalt is any different than TCE</p> <p>22 or any of the other solvents identified in</p> <p>23 that document?</p> <p>24 A I don't know what the specifics</p> <p>25 are, but I believe that perc would do it even</p>

30 (Pages 117 to 120)

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<p style="text-align: right;">Page 121</p> <p>1 Alvey</p> <p>2 quicker.</p> <p>3 Q And why is that?</p> <p>4 A Because it's generally considered a</p> <p>5 more -- a better solvent than trichlor.</p> <p>6 Q And what do you mean by a better</p> <p>7 solvent?</p> <p>8 A That it dissolves things more</p> <p>9 rapidly.</p> <p>10 Q And why is that?</p> <p>11 A I'm not an organic chemist, but I</p> <p>12 believe it's due to the fact that it has</p> <p>13 additional chlorine.</p> <p>14 MR. LYNCH: Mark this as the next</p> <p>15 exhibit.</p> <p>16 (Deposition Exhibit 2545 was</p> <p>17 marked.)</p> <p>18 Q (BY MR. LYNCH) And is that the other</p> <p>19 document referred to in Appendix B, the bulk</p> <p>20 handling and --</p> <p>21 A It is.</p> <p>22 Q -- properties document? If you turn</p> <p>23 to page 2 of that document you'll see that</p> <p>24 there's some highlighting on that page. And I</p> <p>25 will represent for the record that's actually</p>	<p style="text-align: right;">Page 123</p> <p>1 Alvey</p> <p>2 historical runoff referred to in that sentence</p> <p>3 is the primary cause of the contamination</p> <p>4 detected by U.S. EPA in, I believe, what you</p> <p>5 have referred to as the northwest corner area</p> <p>6 of this site?</p> <p>7 A No.</p> <p>8 Q What do you believe is the primary</p> <p>9 cause of that contamination?</p> <p>10 A I didn't really determine what is</p> <p>11 the primary cause. I mean, what I say here</p> <p>12 is that there are many different causes</p> <p>13 potentially.</p> <p>14 Q What are the many different</p> <p>15 potential causes of contamination in the</p> <p>16 northwest corner?</p> <p>17 A Well, I mean, I have listed here</p> <p>18 the ditches, obviously. And then I also have</p> <p>19 overflow or discharges from the catch pond</p> <p>20 and evaporation ponds and migration of</p> <p>21 contaminants from other source areas on site.</p> <p>22 Q Any other causes --</p> <p>23 A Well --</p> <p>24 Q -- of the contamination in the</p> <p>25 northwest corner?</p>
<p style="text-align: right;">Page 122</p> <p>1 Alvey</p> <p>2 my highlighting. And if you want, I can read</p> <p>3 that into the record what it states.</p> <p>4 A That's the PPG document.</p> <p>5 Q It states, Spills of chlorinated</p> <p>6 solvent can quickly damage asphalt surfaces</p> <p>7 and should be properly cleaned up.</p> <p>8 Is that the statement in that</p> <p>9 document to which you were referring to as the</p> <p>10 basis for your understanding as to the rate at</p> <p>11 which perc deteriorates asphalt?</p> <p>12 A Yes, it is.</p> <p>13 Q If you can turn to page 11 of your</p> <p>14 September 6 report. I'll direct your</p> <p>15 attention to -- Opinion 6 on that page of the</p> <p>16 report discusses what you refer to here as the</p> <p>17 northwest corner area of the site. On the</p> <p>18 second sentence of that it states, It is my</p> <p>19 further opinion that the source of this</p> <p>20 contamination is likely due at least in part</p> <p>21 to historical runoff from operational portions</p> <p>22 of the site, comma, which was captured by</p> <p>23 ditches and discharged in this undeveloped</p> <p>24 portion of the site, period.</p> <p>25 Is it your opinion that the</p>	<p style="text-align: right;">Page 124</p> <p>1 Alvey</p> <p>2 A -- you could include drum storage</p> <p>3 back there. We have aerial photo</p> <p>4 documentation of drum storage in that area.</p> <p>5 Let's see. What else? Certainly the ponds.</p> <p>6 Migration of anything. Any spills or leaks.</p> <p>7 And that's all that I can determine for now.</p> <p>8 Q Based on your review of the</p> <p>9 investigative data and other data cited in</p> <p>10 your reports, have you formed an opinion as to</p> <p>11 which of these potential causes is the likely</p> <p>12 cause of the contamination in the northwest</p> <p>13 corner?</p> <p>14 MR. GROSSBART: Would you reread the</p> <p>15 question, please.</p> <p>16 Q (BY MR. LYNCH) Based on your review</p> <p>17 of the investigative data and the other</p> <p>18 documents identified in your reports have you</p> <p>19 formed an opinion as to which of these</p> <p>20 potential causes is the likely cause of the</p> <p>21 contamination?</p> <p>22 MR. DAVIS: Object as to foundation</p> <p>23 and the form of the question. You phrase it</p> <p>24 as though one excludes all the others, and I</p> <p>25 don't know that that's his testimony.</p>

31 (Pages 121 to 124)

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<p style="text-align: right;">Page 125</p> <p>1 Alvey</p> <p>2 MR. GROSSBART: Right. And if he's</p> <p>3 formed an opinion in his report -- I think he</p> <p>4 said he didn't form an opinion. But go ahead.</p> <p>5 I mean, do --</p> <p>6 A Yeah. I did not try to determine</p> <p>7 what I thought was the most likely source out</p> <p>8 there, just that any or all of those factors</p> <p>9 could have contributed to the contamination.</p> <p>10 I might add to my list, now that I am</p> <p>11 thinking about it, off-site sources.</p> <p>12 Q (BY MR. LYNCH) I want to make sure I</p> <p>13 have this clear. So you're not offering an</p> <p>14 opinion as to what the likely source of the</p> <p>15 contamination in the northwest corner is;</p> <p>16 you're merely opining that there are many</p> <p>17 possible sources of the contamination in the</p> <p>18 northwest corner?</p> <p>19 A Correct. I am not -- I did not, in</p> <p>20 my opinion, select a given scenario as most</p> <p>21 likely. I'm saying that, like I just said a</p> <p>22 minute ago, any or all of those could have</p> <p>23 contributed.</p> <p>24 Q But you have no opinion as to</p> <p>25 whether, in fact, any or all of those did, in</p>	<p style="text-align: right;">Page 127</p> <p>1 Alvey</p> <p>2 even prior to Dyce.</p> <p>3 Q You refer to historical runoff from</p> <p>4 operational portions of the site. Is there</p> <p>5 any particular portion of the site you're</p> <p>6 referring to? And we can --</p> <p>7 MR. GROSSBART: Are you asking him</p> <p>8 what he means by operational portions?</p> <p>9 MR. LYNCH: Yes.</p> <p>10 MR. GROSSBART: Do you want a photo</p> <p>11 or a diagram? Where's all the photos that</p> <p>12 were marked as exhibits?</p> <p>13 THE DEPONENT: They're under here.</p> <p>14 MR. GROSSBART: Do you want me to</p> <p>15 show him one of those photos?</p> <p>16 MR. LYNCH: I have a blowup of it.</p> <p>17 Let's mark this as the next exhibit.</p> <p>18 (Deposition Exhibit 2546 was</p> <p>19 marked.)</p> <p>20 Q (BY MR. LYNCH) I'm showing you</p> <p>21 what's been marked as Exhibit 2546. I believe</p> <p>22 it has a date of 1995 in the lower right-hand</p> <p>23 corner. Do you recognize that as a diagram of</p> <p>24 the Dyce site?</p> <p>25 A I do.</p>
<p style="text-align: right;">Page 126</p> <p>1 Alvey</p> <p>2 fact, contribute?</p> <p>3 A Yeah. My opinion is not that any</p> <p>4 one is the source.</p> <p>5 Q You identify one of the potential</p> <p>6 sources in -- that's expressed in Opinion 6 as</p> <p>7 historical runoff. You use the term</p> <p>8 "historical." Do you have an opinion as to</p> <p>9 when that occurred?</p> <p>10 A During the entire history of the</p> <p>11 site.</p> <p>12 Q Am I correct that it's your opinion</p> <p>13 that you can't date the contamination at the</p> <p>14 Dyce site based on the investigative data?</p> <p>15 A I have not attempted to date it.</p> <p>16 Q It's your opinion that the</p> <p>17 contamination could have occurred anytime</p> <p>18 between 1972, when Dyce purchased the site, up</p> <p>19 to the time the contamination was detected by</p> <p>20 U.S. EPA or their agents?</p> <p>21 A I mean, at least in that time</p> <p>22 frame. I mean, if there was a source from</p> <p>23 offsite. I mean, if -- like John said, if</p> <p>24 someone drove a truck out in the northwest</p> <p>25 corner, that could have happened at any time</p>	<p style="text-align: right;">Page 128</p> <p>1 Alvey</p> <p>2 Q Okay. Can you identify on that</p> <p>3 diagram where -- what you're referring to when</p> <p>4 you talk about operational portions of the</p> <p>5 site?</p> <p>6 A Basically everything would be</p> <p>7 operational except the parking lot, which may</p> <p>8 also be considered operational if trucks are</p> <p>9 driving through there.</p> <p>10 Q Okay. So it's your opinion that</p> <p>11 runoff from any part of the area you have just</p> <p>12 circled could be captured by ditches and be</p> <p>13 discharged in the northwest corner of the</p> <p>14 site?</p> <p>15 A No. That's not what I am saying.</p> <p>16 Q Okay. Tell me --</p> <p>17 A I mean, there were ditches that you</p> <p>18 see in the aerials certainly along this side</p> <p>19 of the -- the site, the --</p> <p>20 Q Why don't you identify on the</p> <p>21 diagram where the ditch is --</p> <p>22 A Well, roughly --</p> <p>23 Q -- that you are referring to.</p> <p>24 A -- roughly where the ditches are.</p> <p>25 And then over here somewhere.</p>

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<p style="text-align: right;">Page 141</p> <p>1 Alvey</p> <p>2 the northwest corner area. What -- what about</p> <p>3 the source is distinct -- the source of the</p> <p>4 contamination in the northwest corner area is</p> <p>5 distinct from the sources of the contamination</p> <p>6 found in the other areas?</p> <p>7 A Well, that there's no BTEX there</p> <p>8 sensibly.</p> <p>9 Q And what does that indicate about</p> <p>10 the source of the northwest corner area -- of</p> <p>11 the contamination found in the northwest</p> <p>12 corner area?</p> <p>13 A That there was no BTEX -- or</p> <p>14 limited BTEX was in that source.</p> <p>15 Q Do you agree that the source of the</p> <p>16 northwest corner contamination then is</p> <p>17 predominantly a release of perchlorethylene as</p> <p>18 opposed to other -- any other chemicals?</p> <p>19 A I mean, the contamination that was</p> <p>20 found in the northwest corner was</p> <p>21 predominantly perc. There was some TCE there</p> <p>22 also.</p> <p>23 Q Is that indicative that perc</p> <p>24 infiltrated the surface in that area, whereas</p> <p>25 other chemicals didn't?</p>	<p style="text-align: right;">Page 143</p> <p>1 Alvey</p> <p>2 Q Any other basis?</p> <p>3 A I don't believe there's any</p> <p>4 historic records, but it's just a potential</p> <p>5 of a way for things to get out there.</p> <p>6 Q Do you know if any other witness</p> <p>7 disputed Marvin Johnson's testimony that water</p> <p>8 was discharged from the historic catch pond?</p> <p>9 A I don't recall if it was disputed</p> <p>10 or not. It just seemed to me like if you</p> <p>11 have a pond of liquid there it could have</p> <p>12 overflowed or been released out there.</p> <p>13 Q Aside from Marvin Johnson's</p> <p>14 testimony and perhaps the testimony of other</p> <p>15 employees you can't recall here today, you</p> <p>16 have no basis for believing that that did or</p> <p>17 did not happen?</p> <p>18 A Yeah. I don't believe Dyce</p> <p>19 provided any documents that indicated whether</p> <p>20 it did or did not. And I certainly wasn't</p> <p>21 there at the time.</p> <p>22 Q Can you answer my question?</p> <p>23 MR. GROSSBART: Just answer his</p> <p>24 question.</p> <p>25 A Oh, I'm sorry. Any other --</p>
<p style="text-align: right;">Page 142</p> <p>1 Alvey</p> <p>2 A I mean, what it indicates is that</p> <p>3 there's perc there and there's not other</p> <p>4 chemicals there.</p> <p>5 Q And what does that indicate about</p> <p>6 the source of the perc there?</p> <p>7 A That again, it appears to be</p> <p>8 primarily a release of perc -- releases of</p> <p>9 perc.</p> <p>10 Q The second potential cause of the</p> <p>11 contamination in the northwest corner you have</p> <p>12 identified is the overflows from catch pond;</p> <p>13 is that correct?</p> <p>14 A I don't recall what order I gave</p> <p>15 them in.</p> <p>16 Q Well, let's look at -- go back to</p> <p>17 Opinion 6 then. Other contributing factors</p> <p>18 are overflows or discharges from the catch</p> <p>19 pond and/or evaporation ponds.</p> <p>20 Let's start with overflows or</p> <p>21 discharges from the catch pond. What's the</p> <p>22 basis for your opinion that those occurred?</p> <p>23 A At a minimum, Marvin Johnson said</p> <p>24 it. And I don't recall if there were other</p> <p>25 employees.</p>	<p style="text-align: right;">Page 144</p> <p>1 Alvey</p> <p>2 Q (BY MR. LYNCH) Any other basis?</p> <p>3 A Ah, no. No.</p> <p>4 Q What is your understanding as to how</p> <p>5 the discharges from the catch pond occurred?</p> <p>6 MR. GROSSBART: Other than what he</p> <p>7 has testified to? Asked and answered.</p> <p>8 Q (BY MR. LYNCH) How do you believe</p> <p>9 the discharges occurred?</p> <p>10 MR. GROSSBART: He didn't -- hasn't</p> <p>11 said they have occurred. He said he has seen</p> <p>12 evidence of it. He has told you about the</p> <p>13 evidence. But he's not here to give you an</p> <p>14 opinion as to what caused the contamination in</p> <p>15 the northwest corner. So now you're taking it</p> <p>16 and saying, how did it happen, and he</p> <p>17 hasn't -- and there's no foundation. You know</p> <p>18 what I am saying.</p> <p>19 Q (BY MR. LYNCH) Well, then we'll go</p> <p>20 with what your attorney said. At trial do you</p> <p>21 expect to offer any testimony as to what</p> <p>22 caused the contamination in the northwest</p> <p>23 corner?</p> <p>24 MR. GROSSBART: As opposed to</p> <p>25 possibilities.</p>

36 (Pages 141 to 144)

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<p style="text-align: right;">Page 145</p> <p>1 Alvey</p> <p>2 A I mean, I'm not going to testify</p> <p>3 that there was a single activity. I will</p> <p>4 testify that there are different</p> <p>5 possibilities of the way that contamination</p> <p>6 occurred.</p> <p>7 Q (BY MR. LYNCH) Are you going to</p> <p>8 offer any testimony as to whether any of those</p> <p>9 possibilities -- strike that.</p> <p>10 Are you going to offer testimony as</p> <p>11 to whether the contamination is more likely</p> <p>12 than not the result of any of those</p> <p>13 possibilities or a combination of those</p> <p>14 possibilities?</p> <p>15 A I -- I mean, I think I'm going to</p> <p>16 testify that I don't think the alleged spill</p> <p>17 caused it, because that's what my opinion is,</p> <p>18 and that there are many other likely sources.</p> <p>19 Q So you are going to testify that the</p> <p>20 other sources are likely -- are the likely</p> <p>21 causes?</p> <p>22 A Any of these. Not -- not a</p> <p>23 specific one, but that there are other</p> <p>24 contributing factors.</p> <p>25 MR. GROSSBART: He'll testify that</p>	<p style="text-align: right;">Page 147</p> <p>1 Alvey</p> <p>2 MR. LYNCH: He's got overflows or</p> <p>3 discharges in his report.</p> <p>4 MR. GROSSBART: So you want him to</p> <p>5 distinguish between an overflow, which I --</p> <p>6 I --</p> <p>7 MR. LYNCH: Let me ask the witness.</p> <p>8 MR. GROSSBART: Okay.</p> <p>9 Q (BY MR. LYNCH) How do you use --</p> <p>10 what do you mean by an overflow from the catch</p> <p>11 pond?</p> <p>12 A An overflow would be it got filled</p> <p>13 up too far and went over the banks of the</p> <p>14 pond.</p> <p>15 Q Okay. And what do you mean by a</p> <p>16 discharge from the catch pond?</p> <p>17 A A discharge? Again, we would have</p> <p>18 to look at Marvin Johnson's -- or -- and</p> <p>19 whatever other employees -- how they talk</p> <p>20 about the method of discharge from the pond.</p> <p>21 But it could be several different ways.</p> <p>22 Q Sitting here today you don't -- do</p> <p>23 you have a recollection as to what the method</p> <p>24 of discharge Mr. Johnson testified to was?</p> <p>25 A I -- I believe that he said they</p>
<p style="text-align: right;">Page 146</p> <p>1 Alvey</p> <p>2 Mr. Harris was right the first time.</p> <p>3 MR. DAVIS: Or Sullivan.</p> <p>4 Q (BY MR. LYNCH) In your view is the</p> <p>5 investigative data regarding the contamination</p> <p>6 that's been found below the northwest corner</p> <p>7 source area consistent with that contamination</p> <p>8 having been caused by an overflow from the</p> <p>9 catch pond?</p> <p>10 A Is the investigation consistent?</p> <p>11 Q The sampling data.</p> <p>12 MR. GROSSBART: In whole or part,</p> <p>13 right?</p> <p>14 MR. LYNCH: In whole or part.</p> <p>15 A I mean, I think the data indicates</p> <p>16 that it could have come from the catch basin.</p> <p>17 Q (BY MR. LYNCH) My question was a</p> <p>18 little more narrow than that. I'm talking</p> <p>19 just overflows from the historic catch pond.</p> <p>20 A Overflows from the historic catch</p> <p>21 pond?</p> <p>22 MR. GROSSBART: As opposed to --</p> <p>23 wait a second. He has just said it could have</p> <p>24 come from the catch pond, and you are making a</p> <p>25 distinct between --</p>	<p style="text-align: right;">Page 148</p> <p>1 Alvey</p> <p>2 put a hose on. I don't know if it was any</p> <p>3 more specific than that.</p> <p>4 Q Do you have an opinion as to whether</p> <p>5 or not the DNAPL contamination that's been</p> <p>6 identified in the northwest corner source area</p> <p>7 originated from an overflow from the catch</p> <p>8 pond?</p> <p>9 MR. GROSSBART: Again, same problem.</p> <p>10 Are you -- are you asking him whether it's a</p> <p>11 possibility, or are you asking if he's</p> <p>12 determined whether that is the case --</p> <p>13 MR. LYNCH: More likely than not.</p> <p>14 MR. GROSSBART: That doesn't solve</p> <p>15 the problem. Are you asking him to give you a</p> <p>16 -- whether he has an opinion to a reasonable</p> <p>17 degree of scientific certainty that the</p> <p>18 pollution in the northwest corner was caused</p> <p>19 by a discharge from the catch pond, or are you</p> <p>20 asking him if it's a possibility? Those are</p> <p>21 different questions. And you -- we have been</p> <p>22 jumping back and forth, and I would like you</p> <p>23 to be distinct.</p> <p>24 MR. LYNCH: I'll separate the two</p> <p>25 then.</p>

37 (Pages 145 to 148)

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<p style="text-align: right;">Page 149</p> <p>1 Alvey</p> <p>2 MR. GROSSBART: Okay.</p> <p>3 Q (BY MR. LYNCH) Do you have an</p> <p>4 opinion as to a reasonable degree of</p> <p>5 scientific certainty as to whether the DNAPL</p> <p>6 contamination found in the northwest corner</p> <p>7 source area was caused by an overflow from the</p> <p>8 catch pond?</p> <p>9 A No. I mean, my opinion, as is</p> <p>10 stated, is that it's possible.</p> <p>11 Q Do you have an opinion as to a</p> <p>12 reasonable degree of scientific certainty that</p> <p>13 the contamination found in the northwest</p> <p>14 corner source area was caused by historical</p> <p>15 runoff from the operational portions of the</p> <p>16 catch pond?</p> <p>17 A Now again I'm saying it's --</p> <p>18 MR. DAVIS: Whoa, whoa, whoa.</p> <p>19 Historical runoff from the operational</p> <p>20 portions of the catch pond.</p> <p>21 MR. LYNCH: I'm sorry. Yes, I</p> <p>22 misspoke.</p> <p>23 Q (BY MR. LYNCH) Do you have an</p> <p>24 opinion as to a reasonable degree of</p> <p>25 scientific certainty that the contamination</p>	<p style="text-align: right;">Page 151</p> <p>1 Alvey</p> <p>2 the question. You keep narrowing it down to</p> <p>3 the cause, and I don't think he has got that</p> <p>4 opinion.</p> <p>5 Q (BY MR. LYNCH) Okay. Or a cause.</p> <p>6 We'll change it to a cause.</p> <p>7 A I'm going to opine that it is a</p> <p>8 possible cause.</p> <p>9 Q Now I'm confused. So just so I have</p> <p>10 it straight, you will be -- am I correct that</p> <p>11 at trial you be will be offering the opinion</p> <p>12 that to a reasonable degree of scientific</p> <p>13 certainty it is possible that the various</p> <p>14 potential causes you have identified today are</p> <p>15 a cause of the contamination found by U.S. EPA</p> <p>16 in the northwest corner source area?</p> <p>17 MR. GROSSBART: That's not the full</p> <p>18 summation of what he -- of his opinion.</p> <p>19 MR. DAVIS: I mean, all I think</p> <p>20 you're doing now is repackaging his Opinion 6,</p> <p>21 which I think is pretty straightforward, if</p> <p>22 you look at it.</p> <p>23 Q (BY MR. LYNCH) Well, Opinion 6 you</p> <p>24 say that the source of the contamination is</p> <p>25 likely due. And now today you have been</p>
<p style="text-align: right;">Page 150</p> <p>1 Alvey</p> <p>2 found in the northwest corner source area was</p> <p>3 caused by historical runoff from operational</p> <p>4 portions of the site?</p> <p>5 A Now again, I'm saying that it's a</p> <p>6 possibility.</p> <p>7 Q So am I correct that you have no</p> <p>8 opinion -- strike that.</p> <p>9 Am I correct that at trial you will</p> <p>10 not be offering an opinion as to a reasonable</p> <p>11 degree of scientific certainty as to what the</p> <p>12 cause of the contamination in the northwest</p> <p>13 corner source area was?</p> <p>14 MR. DAVIS: Asked and answered.</p> <p>15 A Again, I expect to say that there</p> <p>16 are many possible causes.</p> <p>17 Q (BY MR. LYNCH) And you're not going</p> <p>18 to -- and that's what I want to clarify.</p> <p>19 Are you going to being offering the</p> <p>20 opinion that any of those cause -- that to a</p> <p>21 reasonable degree of scientific certainty --</p> <p>22 certainty, any of those causes were the cause</p> <p>23 of the contamination in the northwest corner</p> <p>24 source area?</p> <p>25 MR. DAVIS: Object to the form of</p>	<p style="text-align: right;">Page 152</p> <p>1 Alvey</p> <p>2 talking about it's a possible cause.</p> <p>3 MR. DAVIS: It goes on to say there</p> <p>4 are other contributing factors.</p> <p>5 MR. LYNCH: And I understand that.</p> <p>6 MR. DAVIS: Okay. So there's his</p> <p>7 opinion.</p> <p>8 Q (BY MR. LYNCH) But is historical</p> <p>9 runoff in the operational portions of the site</p> <p>10 more than just a possible cause?</p> <p>11 A I -- no. It's just a possible</p> <p>12 cause.</p> <p>13 Q Nothing more? Not more likely than</p> <p>14 not?</p> <p>15 A Just a possible cause.</p> <p>16 Q Opinion 6 also talks about overflows</p> <p>17 or discharges from evaporation ponds used</p> <p>18 historically on the site. What do you mean by</p> <p>19 overflows or discharges from evaporation</p> <p>20 ponds?</p> <p>21 A Similar to what the catch ponds,</p> <p>22 either -- either the evaporation pond</p> <p>23 overflowed or it was intentionally discharged</p> <p>24 to that area.</p> <p>25 Q Can you identify on Exhibit 2546</p>

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<p style="text-align: right;">Page 161</p> <p>1 Alvey</p> <p>2 put this on.</p> <p>3 (The last pending question was read</p> <p>4 back.)</p> <p>5 A I have not attempted to age date</p> <p>6 the PCE.</p> <p>7 Q (BY MR. LYNCH) What do you mean by</p> <p>8 relatively new?</p> <p>9 A Just relatively new. I don't have</p> <p>10 any -- I don't have any specific thing in</p> <p>11 mind. Just that in looking at it, newer than</p> <p>12 the catch pond, I guess is what jumped out at</p> <p>13 me. All I'm saying is that I don't think the</p> <p>14 catch pond was the principal source. So the</p> <p>15 fact that the catch pond was there a long</p> <p>16 time ago contributed to the fact that I</p> <p>17 didn't think it was the principal source.</p> <p>18 Q Do you know when the catch pond</p> <p>19 was -- do you have an understanding as to when</p> <p>20 the catch pond was done away with or</p> <p>21 discontinued?</p> <p>22 A Again, I could look at the aerials</p> <p>23 to tell you for sure. But in the '80s</p> <p>24 sometime.</p> <p>25 Q So to summarize -- and correct me if</p>	<p style="text-align: right;">Page 163</p> <p>1 Alvey</p> <p>2 A Yes. Okay.</p> <p>3 Q We have talked a little bit about</p> <p>4 this. I just want to see if this refreshes</p> <p>5 your memory at all as to which employees</p> <p>6 testified regarding the residuals being</p> <p>7 emptied onto the ground.</p> <p>8 A The individual names?</p> <p>9 Q Yes.</p> <p>10 A No, I don't recall.</p> <p>11 Q It's your recollection that at least</p> <p>12 some employees said specifically that it was</p> <p>13 PCE and TCE residuals that were emptied onto</p> <p>14 the ground?</p> <p>15 A That's what I wrote here, so that</p> <p>16 must have been my understanding when I read</p> <p>17 the depositions.</p> <p>18 Q Do you have any understanding based</p> <p>19 on your review of the testimony and other</p> <p>20 evidence as to what percentage of the barrels</p> <p>21 that were returned to the Dyce site at any</p> <p>22 given time were perc barrels as opposed to</p> <p>23 barrels that contained some other chemical?</p> <p>24 A I do not.</p> <p>25 MR. GROSSBART: Do you mean to</p>
<p style="text-align: right;">Page 162</p> <p>1 Alvey</p> <p>2 I'm wrong -- is it your opinion that the</p> <p>3 makeup of the contamination in the northwest</p> <p>4 corner, meaning the degradation information,</p> <p>5 suggests that the contamination got there</p> <p>6 sometime after the catch pond was done away</p> <p>7 with in the '80s?</p> <p>8 A That's not really what I am saying.</p> <p>9 I'm just saying that what the contamination</p> <p>10 looks like indicates to me that the catch</p> <p>11 pond isn't the principal source; that there</p> <p>12 are other sources in addition to the catch</p> <p>13 pond -- other possible sources.</p> <p>14 Q At trial do you expect to offer any</p> <p>15 opinion as to when the perc contamination</p> <p>16 found in the northwest corner likely got into</p> <p>17 the subsurface?</p> <p>18 A My opinions as I present them so</p> <p>19 far do not, so no.</p> <p>20 Q Go to your rebuttal report, page 5,</p> <p>21 the first bullet point. You can read that to</p> <p>22 yourself. And let me know when you're</p> <p>23 finished, please.</p> <p>24 A The one about the drums?</p> <p>25 Q Yes.</p>	<p style="text-align: right;">Page 164</p> <p>1 Alvey</p> <p>2 distinguish between perc and TCE in that</p> <p>3 question?</p> <p>4 Q (BY MR. LYNCH) We'll start out with</p> <p>5 perc.</p> <p>6 A I would have to re-review the</p> <p>7 deposition testimony.</p> <p>8 Q If the testimony indicated that at</p> <p>9 least during the period when the alleged</p> <p>10 dumping from barrels occurred only a small</p> <p>11 fraction of the barrels that were stored at</p> <p>12 the Dyce site were, in fact, PCE barrels,</p> <p>13 would that make it less likely that barrel</p> <p>14 dumping would be a contributing cause or</p> <p>15 possible cause of the contamination in the</p> <p>16 northwest corner?</p> <p>17 MR. GROSSBART: Objection to the</p> <p>18 question. Small fraction of how many barrels?</p> <p>19 MR. DAVIS: Objection; vague.</p> <p>20 MR. GROSSBART: I mean, does --</p> <p>21 Q (BY MR. LYNCH) If the testimony</p> <p>22 indicated that at any -- that 300 barrels were</p> <p>23 stored at the Dyce site at a given time and</p> <p>24 that less than five of those barrels were perc</p> <p>25 barrels --</p>

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<p style="text-align: right;">Page 193</p> <p>1 Alvey</p> <p>2 farm area.</p> <p>3 Q I believe we covered this before,</p> <p>4 but am I correct that you do not have an</p> <p>5 opinion as to what the cause of the</p> <p>6 contamination in the acid tank farm area of</p> <p>7 the site is?</p> <p>8 A That's correct. My opinion is just</p> <p>9 that it's not caused by the alleged spill.</p> <p>10 Q And with respect to the northwest</p> <p>11 corner source area, am I correct that you do</p> <p>12 not have an opinion to a reasonable degree of</p> <p>13 scientific certainty as to what the cause was</p> <p>14 other than that there are potentially several</p> <p>15 multiple possible causes for that</p> <p>16 contamination?</p> <p>17 MR. GROSSBART: Asked and answered,</p> <p>18 but go ahead.</p> <p>19 A I would say that's correct, but my</p> <p>20 opinion is there's many things that could</p> <p>21 have.</p> <p>22 Q (BY MR. LYNCH) If you can turn in</p> <p>23 your rebuttal report, Opinion No. 3. And you</p> <p>24 can read the opinion to yourself, and let me</p> <p>25 know when you are finished.</p>	<p style="text-align: right;">Page 195</p> <p>1 Alvey</p> <p>2 Q I'm just talking about the date, I'm</p> <p>3 sorry, now.</p> <p>4 A Oh, the date.</p> <p>5 Q The date.</p> <p>6 A I did not attempt to date it.</p> <p>7 Q As far as you know, there's nothing</p> <p>8 in the record that would preclude a conclusion</p> <p>9 that the release occurred in the 1975 to '77</p> <p>10 time frame?</p> <p>11 A I don't believe there's anything</p> <p>12 that would preclude it.</p> <p>13 MR. GROSSBART: From a date</p> <p>14 standpoint?</p> <p>15 THE DEPONENT: From a date</p> <p>16 standpoint, certainly.</p> <p>17 MR. LYNCH: I have nothing further.</p> <p>18 MR. DAVIS: Well, let me -- just to</p> <p>19 clarify, I mean going back to your testimony</p> <p>20 about 20/30 minutes ago, Peter, I think you at</p> <p>21 some point earlier today had indicated that</p> <p>22 the amount of prephase perc in the northwest</p> <p>23 corner was consistent with a far more</p> <p>24 current -- I mean, the lack of -- I think you</p> <p>25 determined daughter products --</p>
<p style="text-align: right;">Page 194</p> <p>1 Alvey</p> <p>2 A Okay.</p> <p>3 Q Is it your opinion that based on the</p> <p>4 contamination and/or data collected at the</p> <p>5 SOCO West site by U.S. EPA, MDEQ can't date</p> <p>6 the release that caused -- releases that</p> <p>7 caused the contamination at the site?</p> <p>8 MR. GROSSBART: Asked and answered.</p> <p>9 Go ahead.</p> <p>10 A I mean, that's not what that</p> <p>11 opinion says.</p> <p>12 Q (BY MR. LYNCH) Well, what is your</p> <p>13 opinion then?</p> <p>14 A Well, the opinion says that there's</p> <p>15 nothing about the data that supports</p> <p>16 Dr. Harris' contention that the contamination</p> <p>17 is the result of an incident which occurred</p> <p>18 in the 1970s.</p> <p>19 Q Is there anything about the data</p> <p>20 that tends to refute Dr. Harris' contention as</p> <p>21 to the date of the incident?</p> <p>22 A Well, again, we talked about the --</p> <p>23 kind of the lack of data. But the data that</p> <p>24 does exist along the railroad tracks tends to</p> <p>25 indicate that PCE didn't go down that ditch.</p>	<p style="text-align: right;">Page 196</p> <p>1 Alvey</p> <p>2 THE DEPONENT: Right.</p> <p>3 MR. DAVIS: -- you used? And so</p> <p>4 does -- that data, is that more or less</p> <p>5 consistent with Mr. Harris -- or Dr. Harris'</p> <p>6 conclusions?</p> <p>7 A I mean, just --</p> <p>8 MR. DAVIS: The data on the -- on</p> <p>9 the -- on the -- what's in there?</p> <p>10 THE DEPONENT: In the northwest</p> <p>11 corner if you just look at the data</p> <p>12 qualitatively just look at it, it tells you it</p> <p>13 was a recent spill because of the lack of</p> <p>14 daughter products. No scientific calculation,</p> <p>15 just looking at it, I would say that it's a</p> <p>16 recent spill. Relatively recent.</p> <p>17 MR. LYNCH: Are you finished with</p> <p>18 that? I have a quick follow-up on that.</p> <p>19 Q (BY MR. LYNCH) Looking at the data,</p> <p>20 as you have indicated, are there other</p> <p>21 explanations as to why there might be more PCE</p> <p>22 than its daughter products, other than it</p> <p>23 being a relatively recent spill?</p> <p>24 A There could be other -- other --</p> <p>25 other issues, I guess, that would -- would</p>

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<p style="text-align: right;">Page 197</p> <p>1 Alvey</p> <p>2 account for it.</p> <p>3 Q What variables will affect the</p> <p>4 degradation rate of PCE?</p> <p>5 A All kinds of things. I mean, other</p> <p>6 contaminants in -- in the system, the soil</p> <p>7 type, the microbes in the area, the amount of</p> <p>8 dissolved oxygen, the amount of nitrogen.</p> <p>9 Any number of things. There's a lot of</p> <p>10 variables that affect the degradation rate.</p> <p>11 Q So is it fair to say that to reach</p> <p>12 an opinion with any reasonable degree of</p> <p>13 scientific certainty as to whether or not</p> <p>14 this -- the data indicates a recent spill, a</p> <p>15 release, you need to take into consideration</p> <p>16 each of those variables?</p> <p>17 A Those are variables that you would</p> <p>18 want to take into consideration, yes.</p> <p>19 Q Without taking those into</p> <p>20 consideration can you form an opinion with a</p> <p>21 reasonable degree of scientific certainty that</p> <p>22 this was a recent release as opposed to a</p> <p>23 release that might have occurred in the 1970s?</p> <p>24 A As I said earlier today, I have not</p> <p>25 attempted to age date the contamination.</p>	<p style="text-align: right;">Page 199</p> <p>2 (Time noted: 3:46 p.m.)</p> <p>3</p> <p>4</p> <p>5 PETER D. ALVEY, P.E.</p> <p>6 Subscribed and sworn to before me</p> <p>7 this ____ day of _____, 2006.</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>
<p style="text-align: right;">Page 198</p> <p>1 Alvey</p> <p>2 Q So you have no opinion to a</p> <p>3 reasonable degree of scientific certainty as</p> <p>4 to when this release occurred?</p> <p>5 A Again, I have not attempted to make</p> <p>6 that calculation.</p> <p>7 MR. GROSSBART: Anything else, Max?</p> <p>8 MR. DAVIS: I don't think so. No.</p> <p>9 MR. GROSSBART: Okay.</p> <p>10 (A break was taken from 3:40 p.m. to</p> <p>11 3:45 p.m.)</p> <p>12 MR. LYNCH: We're back on the</p> <p>13 record. It's my understanding that counsel</p> <p>14 have now reached an agreement that they will</p> <p>15 be exchanging the spreadsheets and documents</p> <p>16 that support the calculations made in the</p> <p>17 report of Mr. Alvey and then also the</p> <p>18 calculations that are referred to and opined</p> <p>19 to in the report of Dr. Harris; is that</p> <p>20 correct?</p> <p>21 MR. GROSSBART: Correct.</p> <p>22 MR. LYNCH: I believe that's it.</p> <p>23</p> <p>24</p> <p>25</p>	<p style="text-align: right;">Page 200</p> <p>2 CERTIFICATE</p> <p>3 STATE OF NEW YORK)</p> <p>4 : Ss</p> <p>5 COUNTY OF NEW YORK)</p> <p>6</p> <p>7 I, Mary Goff, a</p> <p>8 Professional Reporter and Notary</p> <p>9 Public within and for the State of New York,</p> <p>10 do hereby certify:</p> <p>11 That PETER D. ALVEY, P.E., the</p> <p>12 witness whose deposition is hereinbefore set</p> <p>13 forth, was duly sworn by me and that such</p> <p>14 deposition is a true record of the testimony</p> <p>15 given by the witness.</p> <p>16 I further certify</p> <p>17 that I am not related to any of the parties to</p> <p>18 this action by blood or marriage, and that I</p> <p>19 am in no way interested in the outcome of this</p> <p>20 matter.</p> <p>21 IN WITNESS WHEREOF, I</p> <p>22 have hereunto set my hand this 16th day of</p> <p>23 January 2006.</p> <p>24</p> <p>25 MARY GOFF</p>

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